IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-13 (canceled).

14. (currently amended) Method for producing a carbon element having a honeycomb-shaped structure, comprising the steps of:

obtaining a resin-impregnated, paper ~~or fleece~~ base body with a honeycomb-shape;

pyrolyzing the honeycomb-shaped, resin-impregnated, paper or fleece base body;

stabilizing and/or ~~compressing~~ consolidating the pyrolyzed base body;

coating the stabilized and/or ~~compressed~~ consolidated, pyrolyzed base body with a carbon-containing solution; and

pyrolyzing the coated, stabilized and/or ~~compressed~~ consolidated, pyrolyzed base body to obtain the carbon element.

15. (previously presented) Method pursuant to claim 14, wherein the base body comprises a resin-impregnated Aramid paper.

16. (currently amended) Method pursuant to claim 14, wherein the stabilizing and/or ~~compressing~~ consolidating comprises material precipitation from the gaseous phase.

17. (currently amended) Method pursuant to claim 16, wherein the stabilizing and/or ~~compressing~~ consolidating comprises CVI and/or CVD precipitation with at least one of C, SiC, B_4C and Si.

18. (currently amended) Method pursuant to claim 14, wherein the stabilizing and/or ~~compressing~~ consolidating comprises forming an SiC or PyC layer on the pyrolyzed base body.

19. (currently amended) Method pursuant to claim 14,

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additionally comprising coating the pyrolyzed and stabilized and/or ~~compressed~~ consolidated base body with a ceramic slip, and converting the slip into ceramic.

20. (previously presented) Method pursuant to claim 19, wherein the ceramic is SiC.

21. (previously presented) Method pursuant to claim 14, wherein the step of pyrolyzing the honeycomb-shaped, resin-impregnated, paper or fleece base body comprises carbonizing at a temperature T_1 of $850^0C \leq T_1 \leq 1100^0C$.

22. (previously presented) Method pursuant to claim 21, wherein $900^0C \leq T_1 \leq 1000^0C$.

23. (currently amended) Method pursuant to claim 14, wherein the step of pyrolyzing the honeycomb-shaped, resin-impregnated, paper ~~or fleece~~ base body comprises graphitizing at a temperature T_2 of $1700^0C \leq T_2 \leq 3100^0C$.

24. (previously presented) Method pursuant to claim 23, wherein $1800^0C \leq T_2 \leq 2450^0C$.

25. (previously presented) Method pursuant to claim 14, wherein the base body comprises high temperature stable carbon or SiC fibers.

26. (previously presented) Method pursuant to claim 14, wherein the base body comprises fibers with a high carbon residue content selected from the group consisting of phenolic resin fibers, Aramid fibers, flax fibers, hemp fibers, and other cellulosic fibers.

27. (previously presented) Method pursuant to claim 14, additionally comprising at least one additional sequence of steps of coating the carbon element with a carbon-containing solution and pyrolyzing the coated carbon element.

28. (currently amended) Method pursuant to claim 14, wherein the pyrolyzed, stabilized and/or ~~compressed~~ consolidated base body is siliconized.

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